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L11

L12

(FILE 'HOME' ENTERED AT 16:01:15 ON 30 JUN 2002) FILE 'REGISTRY' ENTERED AT 16:01:18 ON 30 JUN 2002 882 (5<NI<95 AND 5<PT<95)/MAC L1FILE 'HCAPLUS' ENTERED AT 16:01:49 ON 30 JUN 2002 L2721 L1 38520 (NICKEL OR NI) AND (PT OR PLATINUM) L3 620 L2 AND L3 L420 POWDER? AND L4 L5 FILE 'ZCA' ENTERED AT 16:03:10 ON 30 JUN 2002 FILE 'HCAPLUS' ENTERED AT 16:14:01 ON 30 JUN 2002 SELECT L5 PN 1-FILE 'WPIDS' ENTERED AT 16:14:33 ON 30 JUN 2002 L6 13 E1-35 SELECT L6 IPC 1-113853 E36-88 NOT L6 L7 L8 545 L7 AND L3 AND POWDER? 33 L3/TI AND L8 L9 FILE 'USPATFULL, USPAT2' ENTERED AT 16:16:48 ON 30 JUN 2002 81 L1 L1080 L10 AND L3

65 L3/CLM AND L11

AN 2000:277738 HCAPLUS

DN 132:297138

TI Thermal-barrier coating system with aluminide interlayer on superalloy for gas-turbine service

IN Beele, Wolfram; Van Lieshout, Astrid Helennia Francoise; Marijnissen, Gillion Herman; Maxwell, Douglas Hugh

PA N.V. Interturbine, Neth.

SO Eur. Pat. Appl., 15 pp. CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI EP 995817 A1 20000426 EP 1999-308241 19991019

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRAI US 1998-174864 19981019

The superalloy turbine blades and similar parts are precoated with ceramic thermal barrier, using as the bonding interlayer the Cr-free aluminide alloy contg. Al 10-30, a precious metal 2-60, reactive metals (as Y, Zr, Hf, Sc, and/or rare-earth metal) .ltoreq.3%, and the balance as Ni, Co, and/or Fe. The bonding alloy preferably contains Al 20-25, Pt 30-40, Y 0.2-0.4, and Zr 0.03-0.06%. The bonding-alloy powder is typically applied by plasma spray as the coating <90. mu.m thick on a superalloy substrate, followed by the formation of Al2O3 top film interlayer, and the deposition of top ceramic coating as thermal barrier having a columnar structure. The ceramic layer for thermal barrier is preferably Y2O3-stabilized ZrO2.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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AN 1987:411629 HCAPLUS
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DN 107:11629

- TI Metallic powder mixtures for joining nonoxide ceramics
- IN Hoshizaki, Hironori; Suzuki, Hirobumi; Kageyama, Terutaka
- PA Nippondenso Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

FAN. CNI I					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61291939	A2	19861222	JP 1985-131190	19850617
	JP 07091610	B4	19951004		
	US 4764435	Α	19880816	US 1986-874996	19860616
PRAI	JP 1985-131190		19850617	•	

AB The brazing mixts. contain Pt, Pd, Rh, Ir, Ru, and/or Os 2-70 wt.%; Cr, Mn, Fe, Co, Ni, and/or Cu 30-98 wt.%; and B, C, Si, and/or P 1-30 wt.%. A TiC and Kovar alloy parts were joined with a braze contg. Pt 25, Cr-17 at.% Ni alloy 62, and P 13 at.% by heating at 1200.degree. for 30 min. Max. torque for breaking the joint was 35 kg-cm. A ceramic heater was similarly joined to Kovar alloy electrodes. The joints had low elec. resistance (0.33-0.36 .OMEGA.), and were resistant to heat and thermal shock.